

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS ✓
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

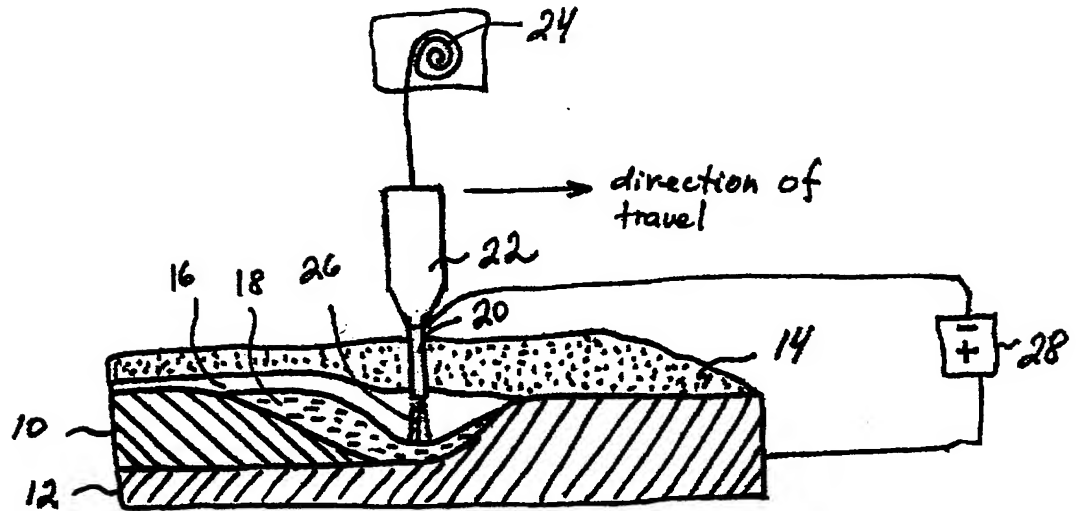


Fig. 1

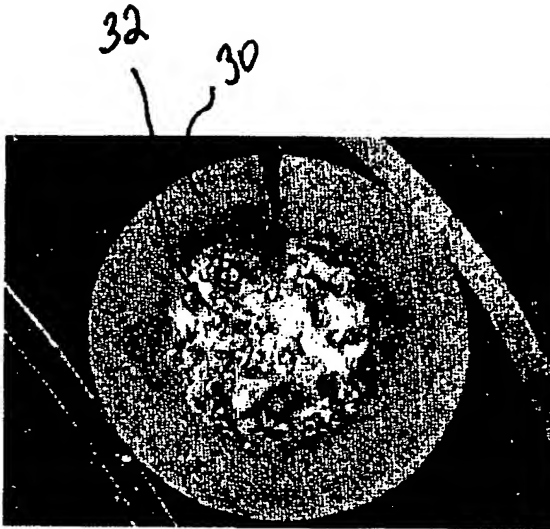


Fig. 2

Table 1.

Raw material	047N-01-003	047N-03-001	047N-03-002	047N-03-003	047N-03-006	047N-03-007	047N-03-008	047N-03-009	047N-03-010	047N-03-011
Fe Powder	83.65	77.25	73.25	73.25	90.75	90.25	87.75	83.25	81.25	61.25
Ferro Mg, Hi C	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
Ferro Si	1.60	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Alumina, Al ₂ O ₃		7.00	7.00	7.00	0.50	0.50	1.00	3.00	3.00	7.00
Alumina, Al ₂ O ₃ with Na ₂ O ₃		7.00	7.00	7.00		0.50	0.50	3.00	3.00	7.00
MgCO ₃										1.00
MgAl, 40x200m				4.00			2.00		2.00	4.00
CaF ₂										4.00
MgAl, -200m			4.00					2.00		
CaCO ₃	4.00								2.00	4.00
Fluorspar, CaF ₂	5.00									1.00
MgO	2.00									2.00
Approx slag, %	11.00	14.00	18.00	18.00	0.50	1.00	3.50	8.00	10.00	30.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Fig. 3

Table 2

Flux Composition	Wt%
Bauxite/ Al_2O_3	30%
Fluorides	15%
Silicates and binders	10%
Magnesite	10%
Manganese Compounds	10%
Quartz, SiO_2	5%
Silicon	<5%
Mineral Silicates	<5%
Iron	<5%

Fig. 4

Deposit Chemistries

Table 3

Element	Carbon Steels	Low Alloy Steels
C	0.15	0.15
Mn	1.80	2.10
Si	0.90	0.80
P	0.030	0.030
S	0.030	0.030
Cr	-	8.0
Ni	-	4.0
Mo	-	1.0
Cu	0.30	0.75
Ti +V+Zr	-	0.030

Fig. 5